

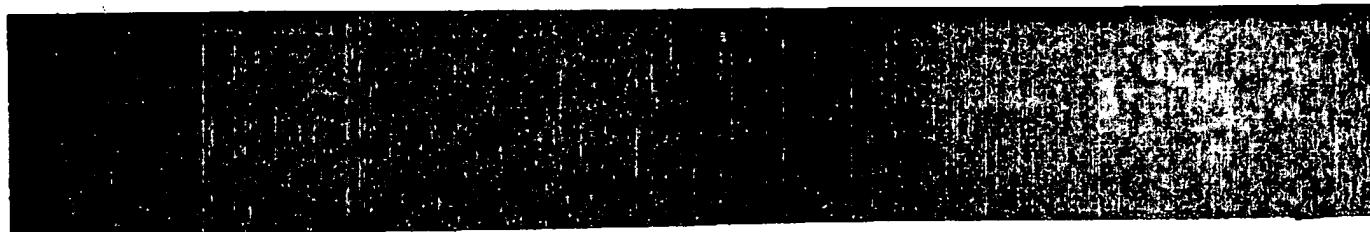
# NEWTON'S TELECOM DICTIONARY

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## Apologize / Application Metering

**Apologize** To lay the foundation for a future offense.

**APON** ATM Passive Optical Network. A passive (i.e., with no repeaters or other active electronics) optical network running ATM. APON is used in the local loop to connect terminal devices to an all optical network running the ATM protocol. See also ATM, Fiber Optics, PON, and SONET.

**APOT** Additional Point Of Termination. The significance of APOT is that in the CLEC environment APOT is a requirement to submit LSR orders for collocation. These are some requirements that apply to APOT from Bell's point of view: APOT= Location "A" tie down information; CFA= Location "Z" tie down information; ACTL= Location "A" CLLI; LST= Location "Z" CLLI.

**Apparent Power** The mathematical product of the RMS current and the RMS voltage. Identical to the VA rating.

**APPC** Advanced Program-to-Program Communications. In SNA, the architectural component that allows sessions between peer-level application transaction programs. The LUs (Logical Units) that communicate during these sessions are known as LU type 6.2. APPC is an IBM protocol analogous to the OSI model's session layer: it sets up the necessary conditions that enable application programs to send data to each other through the network.

**APP/C/PC** An IBM product that implements APPC on a PC.

**Appearance** Usually refers to a private branch exchange line or extension which is on (i.e. "appears") on a multi-button key telephone. For example, extension 445 appears on three key systems.

**Appearance Test Point** The point at which a circuit may be measured by test equipment.

**Append** To add the contents of a list, or file, to those of another.

**APPGEN** A shortened form of the words APPLICATIONs GENerator.

**Apple Computer, Inc.** Cupertino, CA. Manufacturer of personal computers. Heavy penetration in the graphics/desktop publishing business and in education. Apple was formed on April Fool's Day, 1976, by Steve Wozniak and Steve Jobs, aided greatly by Mike Markkula.

**Apple Desktop Bus** The interface on a Mac where non-peripheral devices, such as the keyboard, attach. A Mac keyboard or mouse is called an ADB device. Contrast with peripherals, which attach through the SCSI interface. See also USB, which is a new bus for use on PCs but fulfilling essentially the same function as the Apple Desktop Bus.

**Apple Desktop Interface** ADI. A set of user-interface guidelines, developed by Apple Computer and published by Addison-Wesley, intended to ensure that the appearance and operation of all Macintosh applications are similar.

**Apple Menu** The Apple icon in the upper left hand corner of the Apple Macintosh screen. The Apple menu contains aliases, control panels, the chooser and other desk accessories.

**Apple Pie** Both an American icon, and the name chosen for Apple Computer's Personal Interactive Electronics (PIE) division, chartered with extending the company into new growth areas such as Personal Digital Assistants (PDAs), e.g. the Apple Newton. The PIE division includes Apple Online Services, Newton and Telecommunications group, publishing activities, and ScriptX-based multimedia PDA development.

**Apple Remote Access** ARA is Apple Computer's dial-in client software for Macintosh users allowing remote access to Apple and third party servers.

**Apple URP** Apple Update Routing Protocol. The network routing protocol developed by Apple for use with Appletalk.

**AppleShare** Apple Computer's local area network. It uses AppleTalk protocols. AppleShare is Apple system software that allows sharing of files and network services via a file server in the Apple Macintosh environment. See AppleTalk.

**Applets** Mini-programs that can be downloaded quickly and used by any computer equipped with a Java-capable browser. Applets carry their own software players. See Java.

**AppleTalk** Apple Computer's proprietary networking protocol for linking Macintosh computers and peripherals, especially printers. This protocol is independent of what network it is layered on. Current implementations exist for LocalTalk (230.4 Kbps) and EtherTalk (10 Mbps).

**AppleTalk Address Resolution Protocol** See AARP.

**AppleTalk Zone and Device Filtering** Provides an additional level of security for AppleTalk networks. On AppleTalk networks, network managers can selectively hide or show devices and/or zones to ARA clients. See ARA.

**Appliance** See Edge Appliance.

**Application** A software program that carries out some useful task. Database man-

agers, spreadsheets, communications packages, graphics programs and word processors are all applications.

**Application Based Call Routing** In addition to the traditional methods of routing and tracking calls by trunk and agent group, the latest Automatic Call Distributors route and track calls by application. An application is a type of call, for example, sales or service. Tracking calls in this manner allows accurately reported calls, especially when they are overflowed to different agent groups. See ACD.

**Application Binary Interface** ABI. The rules by which software code is written to operate specific computer hardware. Application software, written to conform to an ABI, is able to be run on a wide variety of system platforms that use the computer hardware for which the ABI is designed.

**Application Bridge** Aspect Telecommunications' ACD to host computer link. Originally it ran only over R2-232 serial connections, but it now runs over Ethernet, using the TCP/IP link protocol. See also Open Application Interface.

**Application Class** An SCSA term. A group of client applications that perform similar services, such as voice messaging or fax-back services.

**Application Entity** AE. A cellular radio term. An Application Entity provides the service desired for communication. An Application Entity may exist in an M-ES (Mobile End System) (i.e., mobile application entity) or an F-ES (Fixed End System). An Application Entity is named with an application entity title.

**Application Equipment Module** AEM. A Northern Telecom term for a device within the Meridian 1 Universal Equipment Module that supports Meridian Link Modules. The Meridian Link Module (MLM) is an Application Module, specially configured to support the Meridian Link interface to host computers.

**Application For Service** A standard telephone company order form that includes pertinent billing, technical and other descriptive information which enables the company to provide communications network service to the customer and its authorized users.

**Application Framework** This usually means a class library with a fundamental base class for defining a complete program. The framework provides at least some of the facilities through which a program interfaces with the user, such as menus and windows, in a style that is internally consistent and abstracted from the specific environment for which it has been developed.

This is an explanation I received from Borland. I don't quite understand it, yet. An application framework is an object-oriented class library that integrates user-interface building blocks, fundamental data structures, and support for object-oriented input and output. It defines an application's standard user interface and behavior so that the programmer can concentrate on implementing the specifics of the application. An application framework allows developers to reuse the abstract design of an entire application by modeling each major component of an application as an abstract class.

**Application Gateway** A firewall that applies security mechanisms to specific applications, such as FTP and Telnet servers. An application gateway is very effective but can impose a performance degradation.

**Application Generator** AG. A program to generate actual programming code. An applications generator will let you produce software quickly, but it will not allow you the flexibility had you programmed it from scratch. Voice processing "applications generators," despite the name, often do not generate programming code. Instead they are self-contained environments which allow a user to define and execute applications. They are more commonly called applications generator, since one generator can define and execute many applications. See Applications Generator for a longer explanation.

**Application Layer** The topmost, visible to the user, presentation of a communications network; the user interface point in network architectures. See Open Systems Interconnection — Reference Model.

**Application Level Firewall** A firewall system in which service is provided by processes that maintain complete TCP connection state and sequencing. Application level firewalls often re-address traffic so that outgoing traffic appears to have originated from the firewall, rather than the internal host.

**Application Level proxy** A firewall technology that involves examining application specific data in order to guard against certain types of improper or threatening behaviors.

**Application Metering** The process of counting the number of executions of the copies of an application in use on the network at any given time and ensuring that the number does not exceed preset limits. Application metering is usually performed by a network

**Camcorder**

lated Voice and Data Transfer, Consultation voice and data), Transfer Load balancing, Outbound dialing, Event logging for voicemail Directory (Windows Only), Personal transfer, etc.), Integration with CallPath Customizable Application Programming (3270 or 5250 applications, and on the interface with existing applications via Dynamic protocols (such as TCP/IP). See CallPath

meets your telephone systems with your CallPath/400, which works on the

USA is IBM's architecture that defines the end telephone switches. CallPath Services Distribution Programming Interface (API) that work with telephone systems, with little is provided by the telephone system. The computer terminal simultaneously with the database record can be transferred simultaneously especially in telephone call centers PBXs (Lucent Definity Generic 3, Nortel, Bosch, Alcatel, SDX, Ericsson, Philips, etc. switches (AT&T 5ESS and Northern Bell). IBM's CallPath products provide supervisory applications. IBM has CallPath APIs available, in particular IBM System 390 2 workstations, Windows workstations, etc. See Open Application Interface and

voice and data workstation for use in voice management.

City, UT, which makes computer telephony operating system, CallWare software chip, etc.

Approved by the FCC in May 2000 that led to lower consumer rates and make access charge rates paid by interexchange carriers charge (SLC); and (4) established a \$650 a

announced service in September 1991 telecommunications services to state and local consolidation of user service requirements to 300,000 government customers (OGS) Telecommunications Division

be Tandem software interface which connects switch (either a PBX or an ACD) CAA supports most major PBXs and

of goods implemented and connection with CAD. Only a few factories man intervention in the actual connected in the robot correctly.

ring hub.

component used in high performance connection.

See CAMA/AMA.

Operator Number Identification. An entry on a customer-dialed station-

answering/Local Automatic Message

Accounting. Specific versions of AMA in which the ticketing of toll calls is done automatically at a central location for several COs (CAMA) or only at the local office for that office's subscribers. See CESID.

**Camcorder** A camera and a video recording system packaged as a whole.

**CAMEL** 1. Customized Application of Mobile Enhanced Logic. An ETSI standard for GSM (Global System for Mobile Communications). CAMEL enhances GSM for the provisioning of international IN (Intelligent Network) services. In order to effect CAMEL, the GSM operator installs a CSE (CAMEL Service Environment), similar to the wired IN equivalent. The CSE comprises a SSP (Service Switching Point), IPs (Intelligent Peripherals), a SCP (Service Control Point), the SCE (Service Creation Environment) and some additional SS7 (Signaling System 7) software. CAMEL supports the availability of IN services internationally, across GSM networks. Initial services will include voice mail, call waiting, call forwarding, and Freephone (toll-free) access. While only approximately 10% of GSM users currently roam internationally, that number is expected to increase significantly in the future. See also ETSI, GSM and IN.

2. A camel can lose up to 30% of its body weight in perspiration and continue to cross the desert. A human would die of heat shock after sweating away only 12% of body weight. See Camel Droppings.

**Camel Droppings** Some camel droppings are so dry that they can be set on fire as soon as dropped. See also Shit.

**Camel Toes** I don't quite understand this one. But I am assured that it exists. Camel toes describes what some telephone men describe as the sight of a female telephone operator in tight polyester pants — as in a frontal view below waist level.

**Camgirl** A young woman who broadcasts live pictures of herself over the World Wide Web. Also called cam-girl, cam girl or Webcam girl.

**Camp-on** You're calling a telephone on extension or you want to transfer a call to a phone but it's busy. This telephone system feature will allow you to lock the call you're trying to transfer onto the line that's busy. When it becomes free, the phone will ring and the "camped-on" call will be connected automatically.

**Campus** The buildings and grounds having legal contiguous interconnection.

**Campus Area Network** CAN. A network that provides interconnectivity in a confined geographic area such as a campus or industrial park. Such networks operate over fairly short distances, and do not require public rights-of-way.

**Campus Backbone** Cabling between buildings that share telecommunications facilities.

**Campus Distributor** CD. The international term for the main cross-connect. The distributor from which the campus backbone cable originates.

**Campus Environment** An environment in which users — voice, video and data — are spread out over a broad geographic area, as in a university, hospital, medical center, prison. There may be several telephone systems. There may be several LANs on a campus. They will be connected with bridges and/or routers communicating over telephone, microwave or fiber optic cable.

**Campus Network** A campus network is a LAN that is spread over multiple buildings. Campus Networks are typically created by small companies or divisions of larger firms.

**Campus Subsystem** The part of a premises distribution system which connects buildings together. The cable, interbuilding distribution facilities, protectors, and connectors that enable communication among multiple buildings on a premises.

**CAN** 1. Abbreviation for cancel. The binary code is 100001 and the HEX is 81.

2. See Campus Area Network.

**Cancel** By touching the "cancel" button on a phone system you're telling the phone system to ignore the last command you gave it. That command might have been transfer, hold, park, etc. The "cancel" button is often mistakenly confused with the "release" button. The "release" button acts the same as hitting "Enter" on a computer system, i.e. it tells the system to go ahead and do what you just told it to do, no matter how stupid your command. In short, "Cancel" means kill the last command. You use it when you make a mistake. "Release" means "Enter" — Do it and do it now.

**Cancel Call Waiting** On a touchtone phone in North America, you typically can cancel the feature, Call Waiting, by touchtoning \*70.

**Cancelmouse** A Newsgroup/Usenet Term. An individual who wages war against spamming.

**Cannibalize** To devour a phone system by stripping parts from it to repair another system. A common technique for maintaining equipment whose original manufacturer no longer supplies parts. Before you cannibalize, check out the monthly publication Telecom

Gear. That publication lists sources of secondary telecom equipment. Good stuff, to bottle of wine, were freed by a Cambodian provincial court because there was a cannibalism. The two men, both crematorium workers, were arrested for eating parts of a body they were cremating. Police in Battambang Meanchey province miles northwest of Phnom Penh, were alerted by villagers, who said the men ate human parts after relatives of deceased had left the crematorium. Eating human part common during the 1975-79 Khmer Rouge "killing fields" rule, when an estimate million people died from torture, overwork, disease, execution and widespread famine. Besides having no law against cannibalism, the men were hungry.

**Canonical** Conforming to a generally accepted rule or procedure, commonly referred to the simplest or clearest schema possible. A simple matrix used for translating address is one example. When using Windows XP faxing service, telephone numbers must be in the canonical form in which a U.S. number would appear as +1 (626) 555-1212. If use even a slightly different form, says Microsoft, such as (626) 555-1212 or 1-626-1212, the dialing rules won't be applied and the fax transmission will fail. See Canonical Address and CNAME Records.

**Canonical Address** A method for storing unique telephone numbers. Canonical addressing is used by Windows Telephony TAPI (Telephony API) for making telephone calls from a database of numbers. A canonical address describes all possible aspects of a telephone number. You can call a telephone number using canonical addressing independently of calling location or access method. A canonical address is stored in a database and preceded by an ASCII Hex (2B) to indicate its address type. It includes delimiters and suffix for Country Code, Area Code, Subscriber Number, Subscribers and Name. See a Canonical.

**Canopy Beds** In England in the 1500s, the roof was thatched. Insects and other animals lived there. There was little to stop things from falling into the house. This posed a real problem in the bedroom where bugs and other droppings could really mess up a nice clean bed. Thus came into existence a bed with big posts and a sheet hung over top afforded some protection. Hence canopy beds.

**Centenna** A centenna is a homemade WiFi antenna. It is made out of a soup can such. It is also the brand name of such a device, www.Centenna.com.

**Canuck** Slang for a Canadian. Canadians call each other Canucks.

**Cao's Law** According to the November, 2000 Gilder Technology Report, Cao's Law tells us that the communications spectrum is virtually infinite and that wavelength division multiplexing (WDM) will follow a sort of turbo version of Moore's Law. WDM will spread across an optical fiber more and more and finer and finer channels of light each using less and less power. It will multiply these lambdas two to three times as fast as Moore multiplied transistors. Channels on a fiber will recapitulate the saga of transistors on a chip and exhibit many of the same trade-offs between power and connectivity. On optical fiber, the trade-off is between bitrate and channel count. So far, we can pump a high bitrate on each channel, or we can transmit lots of channels. But we can't do both on the same fiber. The dispersive effects of 10 and 40 Gbps systems, in which the modulated signals tend to "mush" together, can disable high channel count WDM. At the other extreme, each of Avonex's 100,000 channels — if they ever escape from the lab — will probably bear multi-gigabit signals. Nevertheless, there is today among telecom carriers a real world pattern emerging that manifests Simon Cao's law in action.

**CAP** 1. Competitive Access Provider. Also known as AAP (Alternative Access Provider). CAPs provide an alternative means of establishing a connection between a user organization and an IXC (Interexchange Carrier), completely bypassing the ILEC (Incumbent Local Exchange Carrier). CAPs typically deploy high-capacity SONET fiber optic transmission systems in a ring topology around geographic areas in which are found a high density of large businesses. Dots from the fiber optic rings are terminated at both the customer locations and the IXC POPs (Points of Presence). Thereby, end user organizations with substantial levels of interLATA voice and data traffic can bypass the ILEC facilities, which often are made up of poor quality UTP (Unshielded Twisted Pair) and who may take months to provision a T-1 circuit. In addition to providing superior performance and much reduced provisioning time, such fiber optic transmission facilities offer incredible levels of bandwidth, which quickly can be increased, and generally are provided at much lower cost than leased-line ILEC circuits. CAPs also offer the inherent advantage of loop diversity. In the event that the ILEC local loop suffers a catastrophic failure, the CAP loop likely will not be affected, unless both loops follow the same physical path and are destroyed by the same post-hole digger (or other catastrophe). In the unlikely event that the redundant CAP

**Wildcard Mask / WINCE**

**Wildcard Mask** A 32-bit quantity used in conjunction with an IP address to determine which bits in an IP address should be ignored when comparing that address with another IP address. A wildcard mask is specified when setting up access lists.

**Wildcards** Special characters you use to represent one or more characters in an MS-DOS filename. An asterisk (\*) represents several characters and a question mark (?) represents a single character. For example, the command

ERASE \*.BAK  
would erase all the files with the suffix ".BAK."

The command  
ERASE \*.?A?

would erase all the files with "A" as the middle letter in a three-letter suffix.

**Wildfeed** A satellite transmission of a TV show or other broadcast that isn't meant for public viewing. Wildfeeds are raw transmissions of TV shows, sporting events or news reports sent via satellite. It's how American networks send shows to their affiliate stations and Canadian broadcasters, and how TV news reporters feed live reports home. Some of those feeds are listed on Web sites or in a satellite listings guide, but true wildfeeders prefer to go it alone: "It's got to be up there some place," says a typical wildfeeder, "If you've got a big enough dish you can find it."

**Wildfire** The all-hearing, all-doing computer telephony slave from a company called Wildfire Communications, Lexington MA. The product uses very sophisticated voice recognition software so that its "master" (i.e. the user) can get Wildfire to take messages, find him, connect his calls, transfer his calls and act as a super intelligent on-line, computerized, 24-hour a day, never resting, all obedient secretary. Wildfire was a real breakthrough product, first introduced in the fall of 1994 and deserving of its own definition in this illustrious dictionary. Unfortunately Wildfire never caught on bigtime. It used too much processing power and consequently was too expensive. However, several computer telephony companies tried to copy it and the jury is still out. The demonstration on [www.Wildfire.com](http://www.Wildfire.com) is very impressive and worth listening to.

**Wilding** Wireless hackers (aka whackers) search neighborhoods for leaky 802.11b networks to exploit. Most wireless LANs don't enable encryption, but probably should.

**Willful Violation** The act of knowingly committing a violation of the federal safety and health standards. A willful violation is the most serious finable offence.

**WILL** A name Motorola uses for its Wireless Local Loop (WILL) product, which was developed to serve the basic telephony needs of people in urban and difficult to reach rural areas. Cellular based, WILL technology is intended to provide fixed telephony services in areas with little or no existing wireline telephone service or as a supplement to the existing wireline service. It uses very few cellular transmit/receivers — often just one at the end of the landline. The WILL system provides three major benefits to the telecom operator for looking to expand their service area: more rapid deployment of telephone service; lower cost alternative to copper wire installation, and increased flexibility in system implementation and design. A WILL system can be operational in weeks, compared to the huge amounts of time it would take to lay and install copper wire from an end office to each of the subscriber points in a typical local loop. Although WILL is cellular-based, the system does not require a cellular switch. This makes the WILL system a lower cost alternative to using "typical" cellular systems for fixed telephony applications because the total system outlay costs as well as associated backhaul and maintenance costs are reduced. WILL has three elements: the WILL System Controller (WSC), a Digital Loop Concentrator (DLC), and a Motorola cellular base station. It interfaces directly to the central office switch via 2-wire analog subscriber loops.

**Willful Intercept** The act of intercepting messages intended for a station experiencing a line or equipment malfunction.

**Willy-Nilly** The term Willy-Nilly was coined during the summer of 1914 to describe the hasty of correspondence traversing Europe between Kaiser Wilhelm (Willy) of Germany and Czar Nicholas (Nilly) of Russia, as the two sought a means to avoid the collapse of Europe into a world war while maintaining their respective travel schedules on state business, and in the Kaiser's case — on vacation. Their efforts failed, along with the work of many others to find a political solution to the crisis, and the destruction that ensued eclipsed all wars prior and all wars since, including WWII.

**WiMAX** WiMAX, now also known as IEEE 802.16, is a group of broadband wireless communications standards for metropolitan area networks (MANs) developed by a working group of the Institute of Electrical and Electronics Engineers (IEEE). The original 802.16 standard, published in December 2001, specified fixed point-to-multipoint broadband wireless systems operating in the 10-66 GHz licensed spectrum. An amendment, 802.16a,

approved in January 2003, specified non-line-of-sight extensions in the 2-11 GHz spectrum, delivering up to 70 Mbps at distances up to 31 miles. Officially called the WirelessMAN specification, 802.16 standards are expected to enable multimedia applications with wireless connection and, with a range of up to 30 miles, provide a viable last mile technology. An earlier group of IEEE standards, the 802.11 specifications, provide a wireless alternative to Ethernet LANs (local area networks); 802.16 standards are expected to complement these by enabling a wireless alternative to expensive T-1 links connecting offices to each other and the Internet. Although the first amendments to the standard are only for fixed wireless connections, a further amendment, 802.16b, is expected to enable connections for mobile devices. A coalition of wireless industry companies, including Intel, Proxim and Nokia, banded together in April 2001 to form WiMAX, an 802.16 advocacy group. The organization's purpose is to actively promote and certify compatibility and interoperability of devices based on the 802.16 specification, and to develop such devices for the marketplace. According to the WiMAX Forum, the first products based on 802.16 technology are expected to hit in 2004.

**WiMedia Alliance** The WiMedia Alliance is an industry association formed to promote personal-area range wireless connectivity and interoperability among multimedia devices in a networked environment. The Alliance develops and adopts standards-based specifications for connecting wireless multimedia devices. See also IEEE, 802.15.3.

**WIMP Interface** Stands for Windows, Icons, Mouse and Pointing Device or Pull-down menus. A derogatory reference to GUI. Some people think WIMP is on the way out. See also Graphical User Interface.

**WIN 1** Wireless In-building Network. WIN is a technology from Motorola which uses microwaves to replace local area network cabling.

2. WIN services are services that use Wireless Intelligent Network (WIN) functionalities, synonymous to AIN for the wireline services. The WIN is a standard, destined to become the successor to both IS-41 and GSM. IS-41 "Rev. D" is often used interchangeably with WIN.

**WIN Services** See WIN.

**WIN-T** Warfighter Information Network-Tactical. The U.S. Army has a strategy known as Objective Force. It is intended to make soldiers more agile, so that they can deploy more quickly, adapt more readily to changes on the battlefield and strike more lethally. WIN-T is a tactical intranet being developed by the US Army that will use commercial technologies for wired and wireless voice, data and video communications to provide networking for troops on the go. WIN-T will be mobile, secure and survivable and will integrate ground, airborne and satellite-based capabilities into a network infrastructure and will support the army's Future Combat System (FCS), which is envisioned to create an integrated battlespace, where a network of information and communications systems provide a competitive edge to soldiers in the field and commanders in the control room. With WIN-T, Army officials plan to create a mobile network environment that will enable soldiers to send and receive critical information on the fly. The Warfighter Information Network-Tactical will enable troops and their commanders to have continuous access to the information they need, even when they are in transit. WIN-T will provide planning and communications support to warfighters in fortified locations. While warfighters are en route, they will use airborne communications systems to conduct mission planning and rehearsals. WIN-T will enable commanders, staff and other users to simultaneously exchange voice, data and video information between the sustaining base and the deployed area of operation. Through the WIN-T infrastructure, warfighters will have access to specialized services such as Mobile Satellite Services, the Defense Message System, Global Broadcast Service and interfaces to joint, allied and coalition forces.

**WIN XP** An updated version of Windows 2000, replete with a new interface and alleged more reliability.

**WIN-WIN** A deal in which all parties come out better, or at least appear to, or at least feel they all came out better. Marriage, for example, is meant to be a win-win deal. And for some people, me included, it is.

**WIN2000** Windows 2000, an updated version of Windows NT.

**WIN32 API** A 32-bit application programming interface for the Windows family of operating systems. It updates earlier versions of the Windows API with sophisticated operating system capabilities, security, and API routines for displaying text-based applications in a window.

**WIN95** See Windows 95.

**WIN98** See Windows 98.

**WINCE** An acronym for Windows CE, the portable Microsoft Windows for palm top computers.

